

USE OF ALTERNATIVE AND/OR ADDITIONAL BMPs:

No alternative or additional BMPs will be used on this project.

DISCHARGES INTO OR WITHIN ONE LINEAR MILE UPSTREAM OF AND WITHIN THE SAME WATERSHED AS,ANY PORTION OF A BIOTA IMPAIRED STREAM SEGMENT

All outfalls are either located further than 1 linear mile upstream or outside of the watershed of an impaired stream segment that has been listed for criteria violated,"Bio F" (impaired fish community) and/or "Bio M" (impaired macro invertebrate community),within Category 4a,4b or 5,and the potential cause is either "NP" (nonpoint source) or "UR" (urban runoff).

STREAM AND OPEN-WATER BUFFER ENCROACHMENT

Stream Buffers,as defined by O.C.G.A.12-7-1,are impacted by this project.

The contractor is not authorized to enter into stream buffers,except as described in the table below:

Name (name or number of feature)	Location of Buffered Streams and State Waters **			Stream Type (Warm/Cold Water) *	Buffer Impacted (Yes/No)	Buffer Variance Required? (Yes/No)
	Stream Alignment	Begin Sta and Offset	End Sta and Offset			
STREAM *115	SR 133	105+76 LT	107+56 LT	Warm	No	No
STREAM *115	SR 133	106+17 RT	106+36 RT	Warm	Yes	Yes
STREAM *114	SR 133	124+69 RT	125+39 RT	Warm	Yes	No
STREAM *114	SR 133	124+76 LT	125+36 LT	Warm	Yes	No
POND *113	SR 133	188+94 RT	190+25 RT	Warm	No	No
POND *112	SR 133	204+36 RT	206+27 RT	Warm	No	No
POND *106	SR 133	241+50 RT	244+12 RT	Warm	Yes	Yes
STREAM *99	SR 133	291+45 RT	292+75 RT	Warm	Yes	No
STREAM *97	SR 133	329+98 RT	331+66 RT	Warm	Yes	Yes
POND *95	SR 133	308+74 LT	328+41 LT	Warm	Yes	Yes

Locations described above to be used for construction of storm structures as well as general road widening.

Unless noted otherwise,utility companies will be submitting the required permits/variances in conjunction with the impacts caused by their activities.If utility impacts are covered by the Department's stream buffer variance,this shall be noted in the buffer-variance-required column.

* Warm water streams have a 25-foot minimum buffer as measured from the wrested vegetation. Cold water streams have a 50-foot buffer as measured from the wrested vegetation.

** Locations are approximate,a detailed location of stream buffers and authorized work areas are shown on the individual BMP sheets.

SAMPLING GENERAL NOTES:

Representative sampling may be utilized on this project as explained here.The individual outfall drainage basins along the project corridor have been carefully evaluated and compared on the basis of four characteristics:the type of construction activity,the disturbed acreage,the average slope about the outfall,and the soil erosion Index 0-10,10 being the most erodible soil.The construction activity types are new road on fill,new road in cut,road widening,and maintenance/safety.The disturbed area classes are less than or equal to 1 acre,greater than 1 acre to less than 2 acres,and equal to or greater than 2 acres.The average outfall slope is mild if it is equal to or less than 0.03,and steep if it is greater than 0.03.The soil erosion Index is low if it is less than or equal to 5 and high if it is greater than 5. After evaluation of these characteristics as presented in the project's drainage area map,hydrology and hydraulic studies,construction plans,geotechnical soil survey,and erosion sedimentation and pollution control plans,the Department has determined that representative sampling scheme shown below is valid for the duration of the project.The table shows the groups of similar outfall drainage basins.

The Increase in turbidity at the specified locations in the table below will be representative of the alternate outfall drainage basins when similar outfall drainage basins exist. Approved primary and alternate representative sampled features are identified in the table below.

Note:The total site area is 87.40 acres.										Representative Sampling Scheme				
SAMPLING INFORMATION										OUTFALL CHARACTERISTICS				
Primary Sampled Feature	Location (Sta.and side)	Name of Receiving water	Applicable construction stage for sampling	Sampling Type (Outfall or Receiving Water)	Drainage Area (For the receiving water)	Warm or Cold water Stream	Appendix B NTU value (Outfall Sampling Only)	Allowable NTU Increase (Receiving Water - sampling only)	Location Description	Construction Activity	Disturbed Area	Average outfall Slope (rise/run)	Soil Erosion Index	Alternate Outfall Drainage Basins
A	106+09,65' LT	TRIB TO OKAPILCO CREEK	ALL	RECEIVING WATER	0.65 SQ.MI.	WARM	N/A	25	UPSTREAM OF EXISTING 6'X4' RCB UNDER HWY 37, STR#A-O	ROAD WIDENING	N/A	N/A	7.33	E,F3,F1
A	106+09,78' RT	TRIB TO OKAPILCO CREEK	ALL	RECEIVING WATER	0.65 SQ.MI.	WARM	N/A	25	DOWNSTREAM OF EXISTING 6'X4' RCB UNDER HWY 37, STR#A-O	ROAD WIDENING	N/A	N/A	7.33	E,F3,F1
AH1	291+62,72' RT	TRIB TO LITTLE CREEK	PHASE 2,3	OUTFALL	0.44 SQ.MI.	WARM	50	N/A	DOWNSTREAM OF STRUCTURE AH-O	ROAD WIDENING	216 AC.	0.0154	7.33	IJK,MN,Q,RST,U,VW,XYZ,AAFG,AH1,AK,ALM,AN,AO,AP

The primary sampled features specified should be used as the initial sampling locations.An alternate sampled feature may be used if additional sampling is required or to replace a primary sampled feature that is no longer located within the active phase of construction.

The primary sampled features specified should be used as the initial sampling locations.An alternate sampled feature may be used if additional sampling is required or to replace a primary sampled feature that is no longer located within the active phase of construction.

WATER QUALITY INSPECTING AND SAMPLING PROCEDURES

See Special Provision 167 and other contract documents for the inspecting and sampling procedures.

READY MIX CHUTE WASH DOWN

The washing of ready-mix concrete drums and dump truck bodies used in the delivery of Portland cement concrete is prohibited on this site.

In accordance with standard Specification 107:Legal Regulations and Responsibility to the Public,only the discharge "chute" utilized in the delivery of Portland cement concrete may be rinsed free of fresh concrete remains.The Contractor shall excavate a pit outside of State water buffers,at least 25 feet from any storm drain and outside of the travelled way,including shoulders,for a wash-down pit.The pit shall be large enough to store all wash-down water without overtopping.Immediately after the wash-down operations are completed and after the wash-down water has soaked into the ground,the pit shall be filled in,and the ground above it shall be graded to match the elevation of the surrounding areas. Alternate wash-down plans must be approved by the Project Engineer.

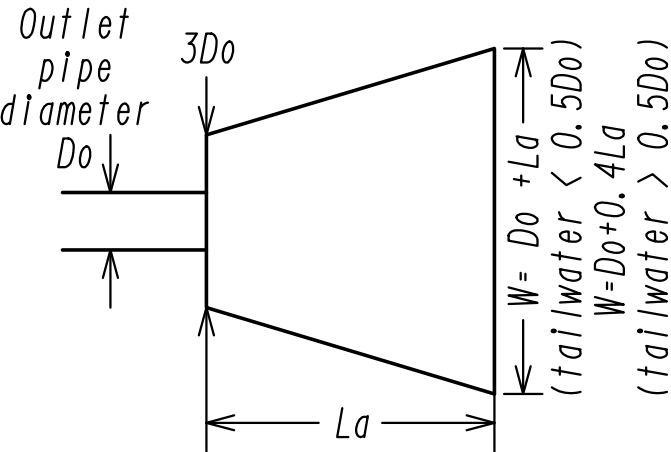
Wash-down plans describe procedures that prevent wash-down water from entering streams and rivers.Never dispose of wash-down water down a storm drain.Establish a wash-down pit that includes the following:(1) a location away from a storm drain,stream,or river,(2) access to the vehicle being used for wash-down,(3) sufficient volume for wash-down water,and (4) permission to use the area for wash down.

On sites where permission or access to excavate a wash-down pit is unavailable,the Contractor may have to wash-down into a sealable 55-gallon drum or other suitable container and then transport the container to a proper disposal site.For additional information,refer to the Georgia Small Business Environmental Assistance Program's "A Guide for Ready Mix Chute/Hopper Wash-down".

CONSTRUCTION NARRATIVE

This roadway project consists of overlay and widening of approximately 5 miles of SR 133 (Billy Langdale Pkwy) in Colquitt County Georgia. Construction to be performed shall include grading,asphalt overlay,graded aggregate base,curb & gutter,closed drainage systems and a new 10' x 4' concrete box culvert.

The project limits will be graded to construct pavement widening and shoulders consisting of a paved shoulder and earth shoulder or curb and gutter and sidewalks.Slopes will be constructed and maintained throughout construction until permanent vegetation may become established. Storm water runoff will be collected in roadside ditches and underground storm piping systems.Sediment from storm water runoff will be controlled by BMP's.



RIPRAP TABLE

STA. OFF	STRUCTURE *	PIPE SIZE	D0 (FT)	d	TAILWATER CONDITION	VELOCITY (FPS)	Peak Flow (cfs)	La (FT)	3D0 (FT)	W (FT)	AREA (SQ)	d50 (IN)	dmax (IN)	APRON DEPTH (IN)
124+94.09, 66.74' RT	C-0/D-0	Dual 48" Pipes	4.00	2.0	MIN	14.58	183.81	25	24	33.0	80	12	18	27
198+44.89, 64.64' RT	Q-0	18" Pipe	1.50	0.3	MIN	8.42	2.27	14	4.5	15.5	16	5	7.5	11.25
204+64.06, 61.17' RT	R-0	30" Pipe	2.50	1.9	MIN	7.63	30.03	14	7.5	16.5	19	5	7.5	11.25
237+76.68, 72.37' LT	U-0	36" Pipe	3.00	2.6	MAX	10.45	68.91	46	9	49.0	149	8	12	18
252+52.96, 59.98' RT	X-0	24" Pipe	2.00	1.5	MIN	6.7	16.52	12	6	14.0	14	5	7.5	11.25
277+59.96, 62.78 LT	AF-0	24" Pipe	2.00	1.8	MIN	7.34	27.69	15	6	17.0	20	6	9	13.5
291+60.61, 66.19' RT	AH-0	24" Pipe	2.00	0.9	MIN	11.26	15.28	15	6	17.0	20	7	10.5	15.75
292+44.08, 67.84' RT	AK-0	30" Pipe	2.50	2.0	MIN	8.19	34.33	18	7.5	20.5	28	7	10.5	15.75
330+39.74, 58.40' RT	AL-0	36" Pipe	3.00	2.2	MAX	8.24	45.94	10	8	13.0	12	5	7.5	11.25
337+30.13, 46.00' RT	AN-0	18" Pipe	1.50	0.7	MIN	3.99	2.94	6	8	7.5	6	6	9	13.5

Columbia Engineering

LAND PLANNERS • CIVIL ENGINEERS • LANDSCAPE ARCHITECTS • SURVEYORS

2763 Meadow Church Road, Suite 100
Duluth, GA 30097-4989
Phone: (770) 925-0357
Fax: (770) 925-0565

REVISION DATES

06/02/14		
07/22/14		
08/21/14		

STATE OF GEORGIA
DEPARTMENT OF TRANSPORTATION
OFFICE: PROGRAM DELIVERY

BMP GENERAL NOTES

SR133 FM SPENCE FLD TO SR35
COLQUITT COUNTY

DRAWING No.
51-003